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| **Topic: Reduce, Reuse, Recycle** | | **Year level:** Year 4 | | | | | | |
| **Duration:**  Term 2: 6 weeks | | **Teacher:** | | | | | | |
| **The Christchurch City Council’s goal is to reduce the amount of solid waste going to the landfill.**  **BIG QUESTION: How can I be a responsible citizen and help reduce the amount of waste going to the landfill?** | | | | | | | | |
| **Key Concepts:**   * Waste is anything no longer useful or left over * If we are to reduce waste we need to develop an attitude where people think before they buy. * Waste management and the three R’s of waste (Reduce, Reuse, Recycle) * Waste management (recycling centres, kerbside rubbish and recycling collection; refuse stations) * Landfills * Use of natural resources * Waste minimisation * Waste decomposition * Methods of waste management/disposal (reusing, recycling, vermicomposting, composting * Personal and community commitment to undertake action - We are all responsible. One person can make a   difference to the environment. | | | | | | | | |
| **SPECIFIC LEARNING OUTCOMES**   * Describe the differences between reduce, reuse and recycle * Sort waste using 3 R’s * Identify ways people manage and take responsibility for waste * Use visual language to present a poster or brochure giving a positive environmental message on one of the three R’s. (ASSESSMENT) * Ask relevant open questions to the inquiry of Reduce, Reuse and Recycle. (ASSESSMENT) * Make informed decisions about what they do with their waste * Promote responsible waste management | | | | | **FOCUS QUESTIONS**  • Why does the city have a solid waste problem?  • What does rethink, reduce, reuse and recycle mean?  • What can you do to help reduce, reuse and recycle?  • How can we help reduce, reuse and recycle?  • What are the effects if we do not rethink, reduce, reuse  and recycle? | | | |
| **ACHIEVEMENT OBJECTIVES**   |  |  |  |  | | --- | --- | --- | --- | | **Curriculum area:**  Social Studies: The Economic World | **Curriculum area:**  Arts: developing practical knowledge- Visual Arts | **Curriculum area:**  Health and Physical Education | **Curriculum area:**  Science- Material World | | **Achievement objectives:**  **Level 2** Students learn about the ways in which people participate in economic activities and to use this knowledge to understand their place in the economic world. | **Achievement objectives:**  **Level 2** Studentsapply knowledge of a variety of materials and processes and use art making conventions. | **Achievement objectives:**  **Level 2** Students identify and use local community resources and explain how these contribute to a healthy community. | **Achievement objectives:**  **Level 2** Students observe and describe properties of familiar materials and group materials in different ways according to their properties. | | **Curriculum area:**  Technology: Technological Practice | **Curriculum area:**  English: Oral, Visual, Written |  |  | | **Achievement objectives:**  **Level 2** Students develop a plan that identifies key stages needed to be undertaken and the resources required to complete a technological outcome. | **Achievement objectives:**  **Level 2** Students will: organise texts using a range of structures.  Use language features appropriately.  Select and use sources of information, processes and strategies. |  |  | | | | | | | | | |
| **RESOURCES**  Waste CCC  Tip the Balance on waste! Environment Canterbury  Kidzone Lesson Plan – Reduce, Reuse and Recycle  Supershed  Environmental Action Kit  The Reuseable Bag Challenge  Keep NZ Beautiful School Kit  Refer MS Delicious  Topic Related Books | | | | | **ASSESSMENT FOCUS**  Self assessment: CCC Waste p31 Check out your attitude  Presentation of poster (rubric) Self reflection  Questioning  Observation | | | |
| **Key Competencies**  (HIGHLIGHT MAIN FOCUS AREAS) | | | | | | | | |
| Thinking  ME as a thinker | Using language, symbols and texts  ME as an ICT user | | | Managing Self  ME as a learner | | Relating to Others  ME as a communicator | | Participating and Contributing  ME as a team member |
| Critical | Investigating | | | Self-assessing | | Articulating ideas | | working in teams |
| Reasoning | identifying information | | | goal setting | | respecting opinions | | Listening |
| Clarifying | Questioning | | | Planning | | active listening | | Questioning |
| Analysing | note taking/ recording ideas | | | working independently | | restating ideas | | sharing ideas and resources |
| Predicting | listing ideas | | | Self motivation | | Questioning | | time management |
| Creative | Sorting | | | Resourceful | | Representing | | Justifying |
| Suggesting | Evaluating | | | working to a timeline | | Reporting | | Reaching a consensus |
| Questioning | Generalising | | | making choices | | Summarising | | Negotiating |
| exploring options |  | | |  | |  | | problem solving |
| considering perspectives | ICT for visual thinking | | |  | | ICT for communicating | | accepting criticism |
| Reflective | ICT for creating | | |  | |  | | giving feedback |
| Predicting |  | | |  | |  | | Reporting |
| Analysing |  | | |  | |  | |  |
| Linking |  | | |  | |  | |  |
| Metacognitive |  | | |  | |  | |  |
| Decision making |  | | |  | |  | |  |
| selecting strategies |  | | |  | |  | |  |
| **Values** (HIGHLIGHT) | | | | | | | | |
| Excellence | Innovation | | | Inquiry | | Curiosity | | Diversity |
| Equity | Community | | | Participation | | ecological sustainability | | Integrity |
| Responsibility | Respect | | | Fairness | | Caring | | Respect |
|  |  | | |  | |  | |  |
| **Tuning In** Prior Knowledge, engaging, wonderings, what are their theories, coming back during inquiry – do they still fit?   1. What would you put in this bin? Children sort objects into the three bins – recycling, organic and rubbish. Remaining items for reusing. 2. CCC Waste p31 Check out your attitude 3. Reducing Waste Bingo p 1 Tip the Balance 4. What do we do in our community to reduce, reuse and recycle? 5. What is reduce, reuse and recycle? Class definitions of 3 R’s – affinity diagram 6. What is solid waste? BRAINSTORM: POST IT notes Create a chart of synonyms for waste. NOUNS: waste, rubbish, refuse, trash etc VERBS: chuck out, toss out, dispose of, turf out etc Where does the waste come from? p30 - 31 CCC Waste Booklet 7. ‘One man’s waste is another man’s treasure’ ‘Waste not, Want not’ What do these quotes mean . . . give examples to prove 8. KWL 9. Children formulate questions to lead to answering Big Question. Use of Servant Servants 10. Alphabet chart 11. Lesson Plan – Tip the Balance Introductory Lesson 2 p6 Waste Monster – Lunchbox Waste – a monstrous problem; The Reusable Bag Challenge Kids’ Booklet p10 | | | | | | | | |
| Finding out  Activities that will help identify the information needed and decide appropriate strategies for investigation | | | Sorting out  Activities to help identify what has been learnt, how best to organise/record information and make connections | | | | Going further  Strategies/activities that will support students in their quest for further knowledge | |
| |  | | --- | | THE FACTS: What are the facts about the city’s solid waste going to the landfill? | | What measures can I take to be a responsible citizen and help reduce the amount of waste going to the landfill? | | **REDUCE:**  The best way to decrease the amount of rubbish we produce is not to produce it in the first place.  Let’s talk about reducing waste: The Reusable Bag Challenge Kids’ Booklet p6  **WAYS OF REDUCING WASTE** – Are you willing to take up the challenge? You could further reduce your rubbish by: thinking before you buy– do I really need this? How you buy– do I need a bag? Can I take my own? What you buy – can I buy long-lasting products rather than buy ones that fall to bits after one use, refills, economy size products and how has the product been packaged? Instead of using plastic supermarket bags, plastic wrap, batteries . . . replace it with . . .  **‘reduce the waste to landﬁll’** campaign  Design a lunchbox - Must be able to hold foods without using plastic wrap  Reduce Waste Ideas Box: make a suggestion box with reducing waste ideas in it. Draw one out each day and try to practise it. For example, reuse bread bags for sandwiches or to buy fruit, in supermarkets  Understanding of what happens to waste *(Individuals small groups/pairs)*  **Data chart**: Classify lunchbox contents according to reduce, reuse and recycle chart.  How could we reduce reuse or recycle something?  REDUCE! Steps I Can Take to Reduce Waste  Reducing waste Bingo – Revisited! P9 Tip the Balance Using new knowledge create own bingo game with a waste reduction theme  **Let’s hit the supermarket p62 – 67 CCC Waste; Govt initiative to reduce plastic bags in supermarkets – news reports**  Plastic Not So Fantastic  Make or buy a  re-useable canvas  shopping bag.  Add your own design  using fabric paint, sew  on some funky buttons  or old scraps of fabric.  **Lesson Plan – Yoghurt Pottles Galore! p 9 Tip the Balance**  ***Rethink: Reduction is the BEST way to deal with waste, because it means there is LESS waste.***  ccc.govt.nz love your rubbish website | | REUSEIt’s about using something again and again and again and ….. ·  Ryan’s Thinker’s Keys Ways of reusing . .?  **Reuse** clean waste from home to use to make a new item. | | **The Waste Stream**  Food marketing. Why is there so much packaging? Look at advertising  techniques and how these are used in packaging to convince consumers they need  the product. The waste and the media (p3 Tip the Balance) | | Recycling is when materials from waste products are reused to make new and  sometimes different products.  <http://www.crc.govt.nz/Our+Environment/Waste/ReuseRecycleRethink/The+5+Rs/Recycle.htm>  Organic Waste: Define organic waste? Examples. Composting and wormeries - build compost bins or worm farms at home. Instructions how to make a compost . . . wormery  Aluminium Can Life Cycle p10 Tip the Balance  **Follow Up Activity – Poem If… I would… And I wouldn’t p4 Student Book – Tip the Balance**  Recycling Paper; Plastic  **RUBBISH MONSTER**  Design a rubbish monster to eat all the rubbish that  can not be recycled or reused.  • Add instructions for caring for your monster!  • What will your monster eat, what will it refuse?  • What happens if the monster eats recyclable goods?  • What does everyone need to do in your household to  make sure the monster has the right food? |   **CCC: Watch Your Waste Tour**  **Have the courage to encourage reduction!**  Are you willing to take on the challenge?  Can you come up with a poster that gets the REDUCE, REUSE or RECYCLE message out there?  Sometimes we need a little reminding about how we can do things differently like bringing a cloth bag or box to put groceries in rather than using plastic bags. One way of making people ‘think’ and remember are posters with quick and easy messages and an eye–catching picture. | | | | | | | | |
| **Drawing conclusions:** state understandings **–What do we think and know now?** How do we feel? **High level thinking** about  the topic. Identifying avenues for action and application. Generalising (should be done throughout)  Create a flow chart to persuade rethinking to REDUCE, REUSE or RECYCLE  Mindmap: How can I be a responsible citizen and help reduce the amount of waste going to the landfill? | | | | | | | | |
| **Reflection and actions**  **Now what? Taking action**. Reflecting on the unit –what, how and why learning has come about? What did I learn about this topic? What did I learn about myself? What should I do now? (Reflect all the way through)  *CCC Waste: Check out your attitude p31; self evaluation p 15*  *Learning reflection* | | | | | | | | |
| EVALUATION/NEXT STEPS | | | | | | | | |